Claims

What is claimed is:

- In a computer controlled user interactive display
- 2 system, a display interface implementation for directing
- a user's attention to specific selectable items on a 3
- display screen with crowded selectable items comprising; 4
- user controlled means for moving an on-screen 5
- pointer to approach said selectable items; and . 6
 - means for highlighting all items in any set of a 7
- 8 plurality of said items wherein each item in the set is
- 9 within a predetermined distance of said approaching
- 10 pointer.
- The computer controlled user interactive display 1
- system of claim 1 wherein said selectable items are 2
- 3 icons.
- The computer controlled user interactive display 1
- system of claim 2 further including means for ending said 2
- highlighting of each of said highlighted icons when the 3
- pointer moves outside of said predetermined distance 4
- for said icon. 5
- 1 The computer controlled user interactive display
- system of claim 2 further including means for ending said 2
- highlighting of each of said highlighted icons after a 3
- predetermined period of time. 4
- The computer controlled user interactive display 1
- 2 system of claim 2 wherein said means for highlighting
- sequentially highlight each icon in said set. 3

- 1 6. The computer controlled user interactive display
- 2 system of claim 2:
- 3 wherein said means for sequentially highlighting
- 4 said set of icons highlight each icon in the set for a
- 5 defined period of time; and
- further including means for enabling the user
- 7 selection of each sequentially highlighted item during
- 8 said period of time.
- 1 7. The computer controlled user interactive display
- 2 system of claim 6 wherein the icons in said set overlap
- 3 each other.

- 1 8. A method for directing a user's attention to specific
- 2 selectable items on a display screen with crowded
- 3 selectable items in computer controlled user interactive
- 4 display systems comprising:
- 5 moving an on-screen pointer to approach said
- 6 selectable items; and
- 7 highlighting all items in any set of a plurality of
- 8 said items wherein each item in the set is within a
- 9 predetermined distance of said approaching pointer.
- 1 9. The method of claim 8 wherein said selectable items
- 2 are icons.
- 1 10. The method of claim 9 further including the step of
- 2 ending said highlighting of each of said highlighted
- 3 icons when the pointer is moved outside of said
- 4 predetermined distance for said icon.
- 1 11. The method of claim 9 further including the step of
- 2 ending said highlighting of each of said highlighted
- 3 icons after a predetermined period of time.
- 1 12. The method of claim 9 wherein said step of
- 2 highlighting sequentially highlights each item in said
- 3 set.
- 1 13. The method of claim 9 wherein said step of
- 2 sequentially highlighting said set of icons highlight
- 3 each icon in the set for a defined period of time; and
- 4 further including the step of enabling the user
- 5 selection of each sequentially highlighted item during
- 6 said period of time.

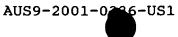
- 1 14. The method of claim 13 wherein the icons in said set
- 2 overlap each other.

- 1 15. A computer program having program code included on a
- 2 computer readable medium for directing a user's attention
- 3 to specific selectable items on a display screen with
- 4 crowded selectable items in computer controlled user
- 5 interactive display systems comprising:
- 6 user controlled means for moving an on-screen
- 7 pointer to approach said selectable items; and
- 8 means for highlighting all items in any set of a
- 9 plurality of said items wherein each item in the set is
- 10 within a predetermined distance of said approaching
- 11 pointer.
- 1 16. The computer program of claim 15 wherein said
- 2 selectable items are icons.
- 1 17. The computer program of claim 16 further including
- 2 means for ending said highlighting of each of said
- 3 highlighted icons when the pointer moves outside of said
- 4 predetermined distance for said icon.
- 1 18. The computer program of claim 16 further including
- 2 means for ending said highlighting of each of said
- 3 highlighted icons after a predetermined period of time.
- 1 19. The computer program of claim 16 wherein said means
- 2 for highlighting sequentially highlights each icon in
- 3 said set.



1 20. The computer program of claim 16 wherein said means

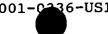
- 2 for sequentially highlighting said set of icons highlight
- 3 each icon in the set for a defined period of time; and
- 4 further including means enabling the user selection
- 5 of each sequentially highlighted item during said period
- 6 of time.
- 1 21. The computer program of claim 20 wherein the icons
- 2 in said set overlap each other.



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1	22. In a computer controlled user interactive display
2	system, a display interface implementation for directing
3	a user's attention to specific selectable items on a
4	display screen with crowded selectable items comprising;
5	user controlled means for moving an on-screen
6	pointer to approach a cluster of said selectable items;
7	and
8	means for sequentially highlighting each item in
9	said cluster when said approaching pointer is within a

predetermined distance from said cluster.



In a computer controlled user interactive display 1 23.

2 system, a display interface implementation for directing

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3 a user's attention to specific selectable items on a

display screen with crowded selectable items comprising: 4

user controlled means for moving an on-screen 5

pointer to approach a cluster of said selectable items; 6

means for determining whether the items in said 7

8 cluster have sufficient separation for said pointer to

select separate items in said cluster; and 9

means responsive to said determining means for 10

sequentially highlighting each item in said cluster when 11

there is insufficient separation. 12

The computer controlled user interactive display 1 24.

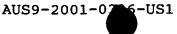
system of claim 23 wherein each item is activated for 2

selection when highlighted. 3



1 25. A method for directing a use:	r's attention to
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- 2 specific selectable items on a display screen with
- 3 crowded selectable items in computer controlled user
- 4 interactive display systems comprising:
- 5 moving an on-screen pointer to approach a cluster of
- 6 said selectable items; and
- 7 sequentially highlighting each item in said cluster
- 8 when said approaching pointer is within a predetermined
- 9 distance from said cluster.



- 26. A method for directing a user's attention to 1
- 2 specific selectable items on a display screen with
- crowded selectable items in computer controlled user 3
- interactive display systems comprising:
- 5 moving an on-screen pointer to approach a cluster of

- said selectable items; 6
- determining whether the items in said cluster have 7
- 8 sufficient separation for said pointer to select separate
- items in said cluster; and 9
- sequentially highlighting each item in said cluster 10
- responsive to a determination that there is insufficient 11
- 12 separation.
- The method of claim 26 wherein each item is 1
- activated for selection when highlighted. 2



- 2 computer readable medium for directing a user's attention
- 3 to specific selectable items on a display screen with
- 4 crowded selectable items in computer controlled user
- 5 interactive display systems comprising:
- 6 user controlled means for moving an on-screen
- 7 pointer to approach a cluster of said selectable items;
- 8 and
- 9 means for sequentially highlighting each item in
- 10 said cluster when said approaching pointer is within a
- 11 predetermined distance from said cluster.

- A computer program having program code included on a 1
- 2 computer readable medium for directing a user's attention
- 3 to specific selectable items on a display screen with
- crowded selectable items in computer controlled user 4
- interactive display systems comprising: 5
- user controlled means for moving an on-screen 6
- pointer to approach a cluster of said selectable items; 7
- 8 means for determining whether the items in said
- cluster have sufficient separation for said pointer to 9
- select separate items in said cluster; and 10
- means responsive to said determining means for 11
- sequentially highlighting each item in said cluster when 12
- there is insufficient separation. 13
- 1 30. The computer program of claim 29 wherein each item
- is activated for selection when highlighted. 2